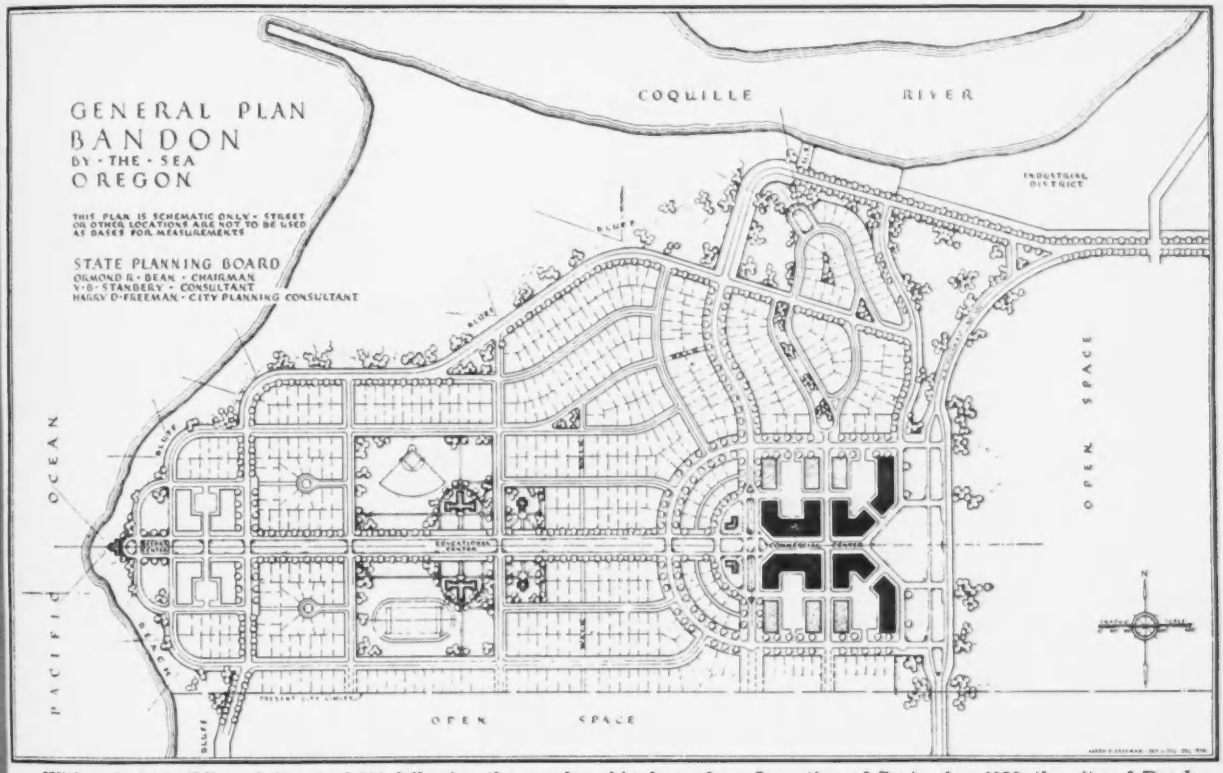
Volunteer Firemen

Professional Journal of the Volunteer Firemen's Section



With only 16 buildings left out of 500 following the wooden shingle roof conflagration of September 1936, the city of Bandon, Oregon, is planning to rebuild along model lines. The above plan is one of the studies made by the State Planning Board in an attempt to improve the layout of the city.

Rebuilding a Burned City

Also in this issue—Prevention of Fires on Power Boats—Fire Emergency Plans Work

Volume 5, Number 5 **BOSTON, MASSACHUSETTS** **May 1938**

National Fire Protection Association

INTERNATIONAL

VITAGUARD

Fire Alarm Systems for Volunteer Fire Departments

The four essential elements of the Vitaguard fire alarm system are illustrated in this diagram.

1. **FIRE ALARM BOXES.** A fire alarm box, when operated, automatically causes the alarm to be sounded and directs the firemen to the scene of fire. Boxes provide the only direct and always accessible means for transmitting alarms to the fire department.

2. **PUBLIC ALARM.** The Diaphone compressed air horn sounds in clear distinct blasts the location numbers transmitted by the fire alarm boxes. Great sound penetration, distinctive tone, and speed have firmly established the Diaphone as an unexcelled public alarm.

3. **CONTROL UNIT.** This unit includes a register, for recording alarms, code signal transmitter, storage battery, rectifier, protective and testing equipment, and line terminals. All instruments are automatically wound.

4. **CIRCUIT.** The simple closed metallic circuit connects the various elements of the system.

Outstanding Features of the Vitaguard System are Simplicity . . . Low Initial and Maintenance Costs . . . Rugged Construction . . . Automatic Operation of Alarm Equipment . . . May be Installed by Local Electrician . . . Saves Time . . . Reduces Fire Loss.

PUBLIC ALARM
Diaphone Horn
Projecting Above Roof

VITAGUARD
CONTROL UNIT

We design simple yet highly effective fire alarm systems for communities of every size. A forty-page catalogue with suggestions for planning an adequate system for your community will be sent upon request.

THE GAMEWELL COMPANY

NEWTON UPPER FALLS MASSACHUSETTS

HORATIO BOND Managing Editor

Volunteer Firemen

Warren Y. Kimball Associate Editor

Volume 5 Number 5

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Robert S. Moulton Technical Secretary
DeWayne E. Nolting Fire Record Department

Please notify us promptly of any change of address

THE 42nd annual meeting of the National Fire Protection Association will be held this month at Hotel Haddon Hall, Atlantic City, N. J. The sessions cover four days, May 9 to 12.

Nearly every item on the program will be of interest to volunteer firemen, and anyone that can make the trip is cordially invited to attend. A program of the meeting has been mailed to the headquarters of fire companies and department members of the Volunteer Firemen's Section. A copy will be mailed to any other reader on request.

INTEREST in firemen's tourneys was aroused by the Firemen's Tournament held in Chicago last Labor Day. Several notable tournaments now on the calendar may serve to bring back this type of event which was at one time part of the life blood of fire department activity.

Next year another National Firemen's Tournament is slated to be a feature of the New York World's Fair. Departments hoping to win laurels there should get under way in full force this year so as to have a tried crew ready for the 1939 competitions.

Probably the biggest firemen's tournament so far scheduled for this year is to be held at Topeka, Kansas, June 8-9. Departments from the states of Kansas, Missouri, Oklahoma, Iowa, Nebraska, Texas, and Colorado will compete. There will be separate contests for both paid and volunteer departments. The tournament will be held before the grandstand at the Kansas Free Fair grounds. In addition to cash prizes, trophies are to be awarded by Governor Walter Huxman and Senator Arthur Capper of Kansas. Any departments interested in getting in on this tournament should write at once to C. W. Snead, director of the tournament, Topeka Fire Department.

Why has the idea of firemen's tournaments so largely died out in many places? Probably because the programs followed were not kept up to date. While there is a lot of fun in an old-fashioned fireman's muster, many of the younger fire fighters could see no thrill in competing with equipment such as hand engines and hand drawn hose reels which they never used at actual fires. Also for the past few years progressive departments have been busy during the summer months with training programs.

However, the firemen's tourney may have its place in the firemen's training program. In the modern tournament many of the events are performed on a drill tower and the teams raise ladders, place streams in service from the upper floors and in fact do everything that they would do at a big fire. The judges are expert drill masters so that in addition to making good time, every team must know how to properly handle their equipment. The modern tourney gives fire companies a chance to perform in competition for prizes the evolutions that they have learned at state and regional drill schools.

MEMBERSHIP in the Volunteer Firemen's Section continues upward. The total for the section now includes 589 departments with 13,125 firemen. Last month 11 more departments with 249 men joined the section for the first time. In addition 54 departments with 1368 men renewed membership. Among the departments renewing membership was that of Oceanside, N. Y. which holds first honors as having the greatest number of firemen enrolled to receive VOLUNTEER FIREMEN. In addition to renewing its membership, the Oceanside Fire Department added the names of seven more firemen, bringing its total enrollment in the section to 141 men.

Departments newly enrolled follow:

Dassel Fire Department, Dassel, Minnesota.
Dover Board of Fire Wardens, Inc., Dover, New Jersey.
Dover Protection Hook & Ladder Company No. 1, Dover, N. J.
Teaneck Fire Department, Teaneck, New Jersey.
Union Corners Engine and Hose Company, Bronxville, New York.
Kimberly-Clark Corporation, Fire Brigade, Niagara Falls, New York.
Wellsville Fire Department, Wellsville, New York.
Edge Hill Fire Company No. 1, Edge Hill, Pennsylvania.
American Fire Company No. 1, Lansford, Pennsylvania.
Cooper Volunteer Fire Department, Cooper, Texas.
Middleton Fire Department, Middleton, Nova Scotia.

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A Problem Question
FOR MAY

Suggested for discussion at company and department meetings this month

78

What is the most effective way of eliminating accidents and fires due to fireworks?

Watch for the answer in the next issue of VOLUNTEER FIREMEN. The answer to the problem question for April will be found on page 6.

Rebuilding a Burned City

Will the Plans of Bandon, Oregon, for a Fine Model City Ban Wooden Shingle Roofs Which Have Served It So Badly?

LAST month in VOLUNTEER FIREMEN the dangers of aerial bombardments and the part played by fire protection forces in such emergencies was discussed. However terrible the warfare at Shanghai and the bombing of the Spanish cities has been, it is only in extraordinary cases that an aerial bombardment has resulted in the complete destruction of an entire city. Yet in peace time it is possible for a community having wooden shingle roofs to be completely destroyed by fire in a few short hours. An example of this was the conflagration that wiped out Bandon, Oregon, on September 26, 1936.

Bombs from the air may wreck a building or group of buildings when a direct hit is scored, but in general, routine business has continued in Madrid and Shanghai during the hostilities. However, in Bandon, only 16 out of 500 buildings remained after the wooden shingle roof conflagration swept through the city. Thirteen persons were trapped and burned to death by the rapid spread of the flames which fed on the tinder-like wooden roofs. So complete was the destruction that Bandon is to be rebuilt along completely new lines.

One of the preliminary plans proposed for the new Bandon is shown on the front cover of this issue. In the old Bandon the business district was located on the flats near the mouth of the river. Under proposed plans both the business and residential areas would be on the high ground approximately 80 feet above the Coquille River and the Pacific Ocean. A more compact community as has been proposed would be easier to protect from fire. Fire apparatus stationed in a new municipal center would be able to quickly cover the entire community and volunteer firemen should lose no time in getting to fires. A zoning ordinance is now being prepared outlining the new business, residential and industrial districts.

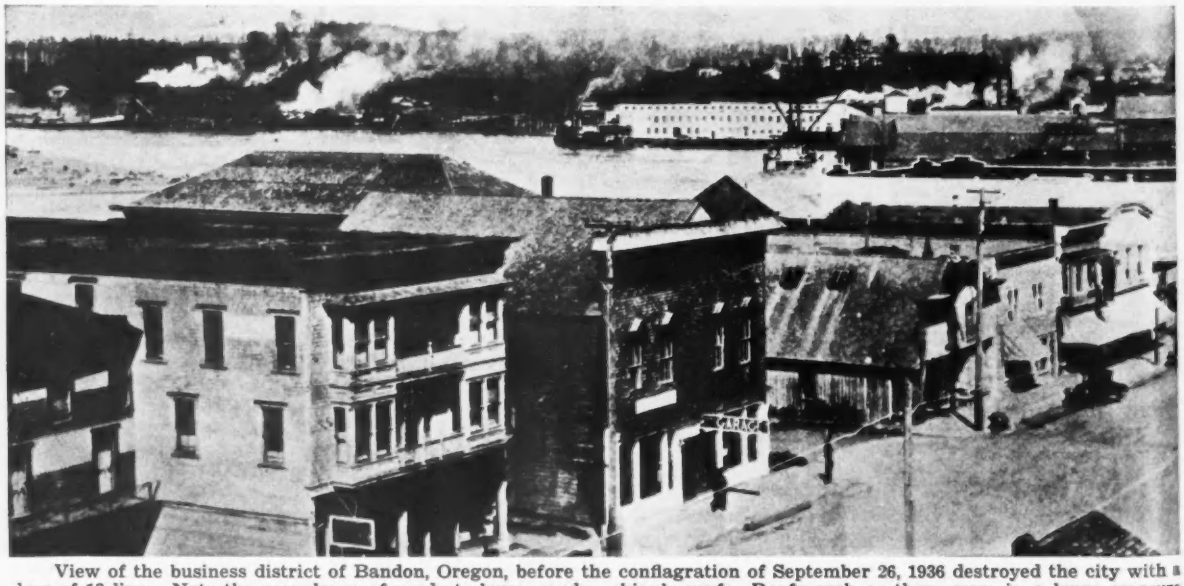
THE new plans for the city attempt to provide development suited to the needs of a city of 1500 population. Conservative and practical planning make it possible for a community to have well paved streets, a good water supply and other utilities at a reasonable cost. Such matters are of importance to fire fighters.

A "greenbelt" or park area about the new city has been proposed as a means of preventing forest fires from attacking the city. The new plan for Bandon makes provision for 500 houses, a number adequate for the population.

Because buildings not properly planned and those constructed by unsupervised amateurs often quickly depreciate, it is proposed that the new permanent buildings be erected in conformance with model plans made by expert architects. This will assure that all new buildings will be modern and attractive.

The people of Bandon have not been homeless while waiting for the new city to be built. Immediately following the fire the American Red Cross provided temporary shelter and the W.P.A. constructed temporary homes. In addition the city council authorized the issuance of permits for the construction of temporary buildings. For the present, commercial activity is being carried on in temporary buildings in the old business district. The temporary buildings may be used for at least a year. When the time comes to make way with these buildings to permit construction in accordance with the approved plan, they must be removed within 120 days after notification from the city officials.

The adoption of a new plan for the city has been made possible by the



View of the business district of Bandon, Oregon, before the conflagration of September 26, 1936 destroyed the city with a loss of 13 lives. Note the prevalence of ready-to-burn wooden shingle roofs. Roofs such as these were in a large measure responsible for the almost complete destruction of the town when it was attacked by a forest fire.

pooling for eventual redistribution of all the property in the municipality. This property pool is new in the history of American city planning. Without it revamping the community along model lines would not be possible. The new city plans are being prepared under the direction of the Oregon State Planning Board.

To prevent land speculation, details of the proposed new plans were not made public until over 75 per cent of the privately owned land had been pooled. The planning work was done in Portland, Oregon, and preliminary plans were eventually made public and adopted at a mass meeting of the property owners. As a matter of fact, due to tax delinquency only one quarter of the land in the city was privately owned at the time of the fire. In addition, of the land which remained privately owned, only 27 per cent was free from delinquent taxes and 40 per cent of the private property had been tax delinquent for five years or more. This tax delinquency was largely because there was more land on the tax rolls than could be used by 1500 inhabitants. Large areas of unused land had been taken for taxes. Under the new plans it is hoped to reduce the developed area of the city enough to eliminate the former large areas of unwanted land on the tax rolls.

Wiped off the map by a wooden shingle roof conflagration! Actual warfare seldom causes such destruction. If Bandon had been bombed its destruction could not have been more complete.

TO OBTAIN money for the rebuilding of Bandon a commitment for a loan was obtained from the U. S. Disaster Loan Corporation, a subsidiary of the U. S. Reconstruction Finance Corporation. However, at the time of the fire the public debt of Bandon was close to $280,000 or $185 per capita. Obviously, Bandon could not carry that debt along with an additional loan sufficient for reconstructing the town.

For this reason the new Federal loan could not be consummated and the cost of reconstruction must be carried by the local property owners. For this reason also rebuilding plans cannot be as ambitious as originally contemplated although the new zoning ordinance and proposed new building laws should help make Bandon a model small city.

Bandon before the fire was an overdeveloped community. Many sparsely settled streets extended into the country beyond the city limits which embrace an area of 905 acres. At the time of the conflagration a forest fire attacked the city on a front a mile long. The fire department had but two pieces of apparatus including one 500 gallon per minute pumper. Although every able-bodied man was mustered to aid in the fight it was impossible with the equipment at hand to protect the widely scattered buildings. As most buildings were covered with wooden shingle roofs the fire was able to jump over the line along which the fire fighters made their stand. In addition to wooden shingles and favorable weather conditions the spread of the fire was aided by an extensive growth of oily gorse bushes in the vicinity.

Bandon was fortunate that its industrial district along the Coquille River escaped destruction during the conflagration thus assuring continued employment for the inhabitants. The credit for saving the industrial property at the time of the conflagration belongs to the Marshfield, Oregon, fire department which made an effective stand with their 1000 gallon pumper. These industrial plants, including a large sawmill and several woodworking plants, are well located and are out of the line of the prevailing winds so that the likelihood of a fire spreading from the mills into the town is reduced.

In spite of the comprehensive nature of the city plan, one important detail appears to be still unsettled. Has Bandon learned the important lesson that wooden shingle roofs are dangerous? This is not the first major conflagration that the city has experienced. A large part of the business district was destroyed by fire in 1914. At that time the burned district was rebuilt of combustible buildings with wooden shingle roofs.

Will the public officials be able to decide this case on the merits or will they be forced to give in to the local lumber interests? Oregon is lumber country. It will be recalled that Berkeley, California, had a $6,000,000 wooden shingle roof conflagration in 1923. Even in such an intelligent and well governed city, the city officials were forced to give in to the lumber interests which blocked their efforts to prohibit wooden shingle roofs.

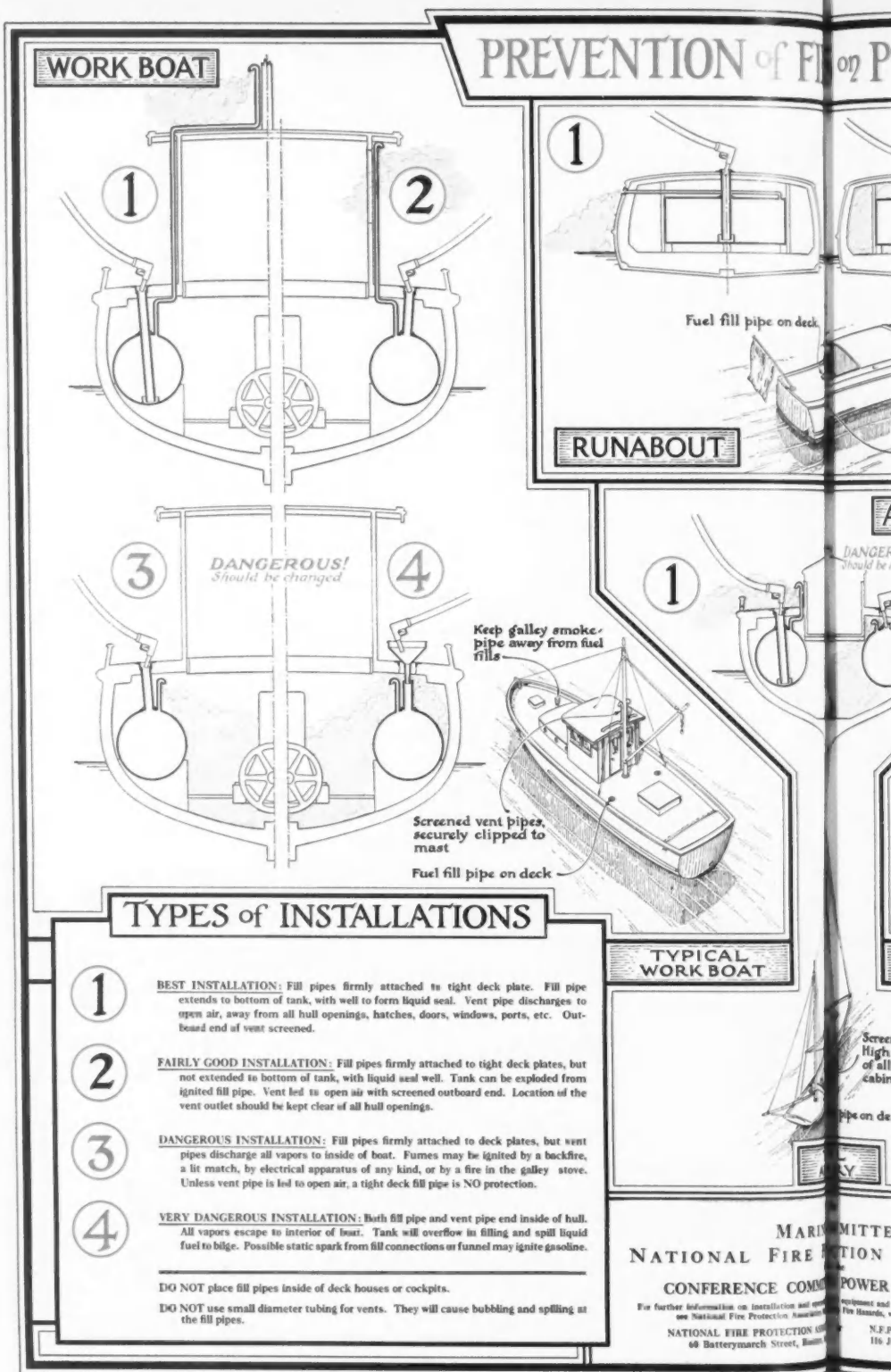
Bandon can never afford to operate a fire department sufficient to cover a large number of simultaneous roof fires. Wooden shingle roofs have served Bandon very badly. Much that is constructive and valuable in the new city plan will be lost if they are not banned forever.

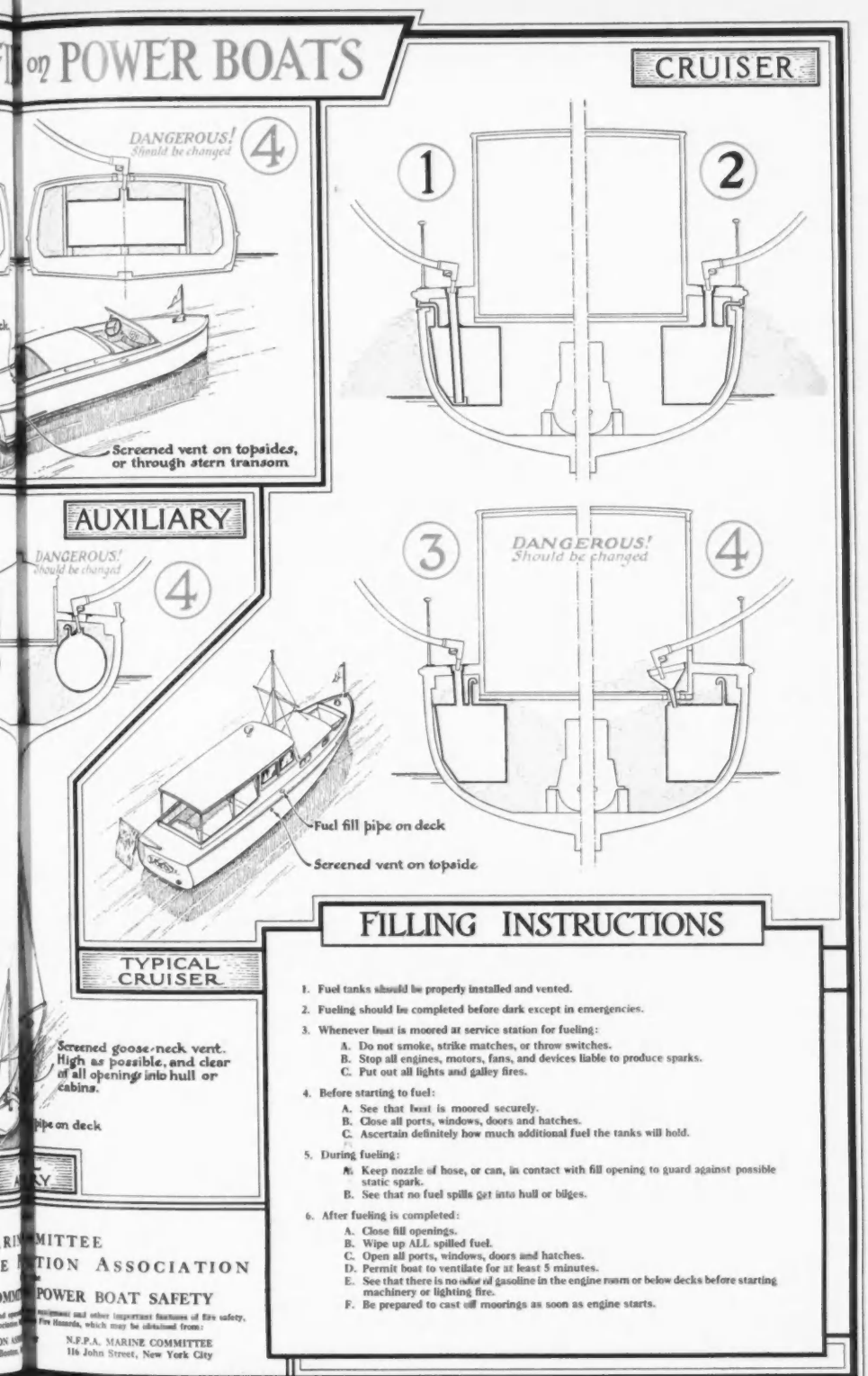
IF THOSE who operate motor boats and yachts could only know what most firemen know! Perhaps then our Monday morning papers during the summer would have fewer accounts of serious motor boat and yacht fires which start with an explosion of gasoline vapors. Some of the explosions come on the water away from possible help. In some cases there is merely a flash fire but other times there is an explosion which blows the craft to bits just as if a bomb had been set off. Sometimes the occupants of the boat can get overboard and escape the fire. Serious burns are usual in these accidents and fatalities are common. Gasoline is used and handled around motor boats and yachts without the safeguards that are present when handled in connection with automobiles. The yachtsman who has dumped it into his fuel tanks carelessly and otherwise slopped it around for years without serious mishap is lulled into a false sense of security.

Gasoline is treacherous. Here's why. To cause an explosion, gasoline must be mixed with a relatively exact proportion of air. If the mixture contains more than 6 percent gasoline vapor in the air, it is too "rich" to explode. If there is under 1.4 percent gasoline vapor, the mixture is too "lean" to explode. This is a fairly narrow range so a good part of the time the gasoline mixture is not right to cause an explosion.

Practically no motor craft are equipped with instruments which will tell exactly when an explosive mixture has been developed in the bilges or other enclosed compartments. The mixture, however, can be set off by many sources of ignition such as a motor backfire, lighted matches, or a galley stove.

The accompanying chart shows how to arrange the


PREVENTION of FI on P
WORK BOAT
1
2
3
4
DANGEROUS!
Should be changed
1
Fuel fill pipe on deck
RUNABOUT
1
Keep galley smoke-pipe away from fuel fills
Screened vent pipes, securely clipped to mast
Fuel fill pipe on deck
TYPICAL WORK BOAT
TYPES of INSTALLATIONS
1
BEST INSTALLATION: Fill pipes firmly attached to tight deck plate. Fill pipe extends to bottom of tank, with well to form liquid seal. Vent pipe discharges to open air, away from all hull openings, hatches, doors, windows, ports, etc. Outboard end of vent screened.
2
FAIRLY GOOD INSTALLATION: Fill pipes firmly attached to tight deck plates, but not extended to bottom of tank, with liquid seal well. Tank can be exploded from ignited fill pipe. Vent led to open air with screened outboard end. Location of the vent outlet should be kept clear of all hull openings.
3
DANGEROUS INSTALLATION: Fill pipes firmly attached to deck plates, but vent pipes discharge all vapors to inside of boat. Fumes may be ignited by a backfire, a lit match, by electrical apparatus of any kind, or by a fire in the galley stove. Unless vent pipe is led to open air, a tight deck fill pipe is NO protection.
4
VERY DANGEROUS INSTALLATION: Both fill pipe and vent pipe end inside of hull. All vapors escape to interior of boat. Tank will overflow in filling and spill liquid fuel to bilge. Possible static spark from fill connections or funnel may ignite gasoline.
DO NOT place fill pipes inside of deck houses or cockpits.
DO NOT use small diameter tubing for vents. They will cause bubbling and spilling at the fill pipes.
NATIONAL FIRE
CONFERENCE COM
NATIONAL FIRE PROTECTION
60 Batterymarch Street,


on POWER BOATS
CRUISER
DANGEROUS! Should be changed
4
Screened vent on topsides, or through stern transom
1
2
AUXILIARY
DANGEROUS! Should be changed
4
3
DANGEROUS! Should be changed
4
Fuel fill pipe on deck
Screened vent on topside
TYPICAL CRUISER
Screened goose-neck vent. High as possible, and clear of all openings into hull or cabins.
pipe on deck
FILLING INSTRUCTIONS
1. Fuel tanks should be properly installed and vented.
2. Fueling should be completed before dark except in emergencies.
3. Whenever boat is moored at service station for fueling:
A. Do not smoke, strike matches, or throw switches.
B. Stop all engines, motors, fans, and devices liable to produce sparks.
C. Put out all lights and galley fires.
4. Before starting to fuel:
A. See that boat is moored securely.
B. Close all ports, windows, doors and hatches.
C. Ascertain definitely how much additional fuel the tanks will hold.
5. During fueling:
A. Keep nozzle of hose, or can, in contact with fill opening to guard against possible static spark.
B. See that no fuel spills get into hull or bilges.
6. After fueling is completed:
A. Close fill openings.
B. Wipe up ALL spilled fuel.
C. Open all ports, windows, doors and hatches.
D. Permit boat to ventilate for at least 5 minutes.
E. See that there is no odor of gasoline in the engine room or below decks before starting machinery or lighting fire.
F. Be prepared to cast off moorings as soon as engine starts.
MITTEE
TION ASSOCIATION
POWER BOAT SAFETY
N.F.P.A. MARINE COMMITTEE
116 John Street, New York City

fuel tanks so as to avoid the presence of gasoline vapors where they may cause explosions. If attention is given to the details illustrated, there is no reason why yachting cannot be a safe recreation rather than a serious hazard of death and injury by fire.

THE two most important points which determine the relative safety of fuel tank installations on boats are the tank fill pipe and the vent pipe. The fill pipe should be firmly attached to a tight deck plate and extend to the bottom of the fuel tank where there should be a well to form a liquid seal. Where there is no liquid seal at the bottom of the fill pipe the tank can be exploded from ignition at the fill pipe during filling operations. If the fill pipe is inside the hull instead of being firmly attached to the deck plate, vapors will escape to the interior of the boat and there is danger of spilling fuel into the bilge while filling the tank.

The vent from the fuel tank is also of utmost importance. It must discharge to the open air away from all hull openings including hatches, doors and ports. The outboard end of the vent should be screened to prevent any flame following back through the vent pipe into the tank. The screen cools the flame enough to prevent ignition of any vapor beyond. Unless the vent pipe is led to the open air a tight deck fill pipe gives slight protection.

Larger two color reproductions of this poster, 17 by 22 inches in size, may be obtained at a cost of ten cents from the National Fire Protection Association, 60 Batterymarch St., Boston, Mass. Perhaps there are boat houses, yacht club piers and other places in your community where a copy of this poster could be displayed to good advantage.

Fire Emergency Plans Work

Two Cities Saved from Disasters Because of Fire Department's Advance Planning

UNEXPECTED emergencies are frequently threatening the peace and security of civilized community life. Such unusual emergencies may include, earthquakes, tornadoes, floods, conflagrations, broken gas mains, failure of water supply, and many other forms of threatened disaster. In any such situation it is imperative that coordinated action by the fire department, police department, and other agencies interested in public safety, be swift and efficient. Because in most communities the fire department can mobilize the largest number of trained men at a moment's notice and because most emergencies bring an abnormal fire hazard, every fire department should have an official plan of action for every possible type of emergency.

The following accounts of the way in which two progressive fire departments having prearranged emergency plans handled similar threatening situations should impress every far sighted fire fighter with the importance of efficient emergency organization.

STILLWATER, Oklahoma, a college city of about 9,000 population, is supplied with natural gas from a distant oil field by a single high pressure gas pipe line. At 12:45 a.m. on February 27, the high pressure line ruptured due to a faultily welded patch on the pipe while the pressure was approximately 425 pounds. The city gas supply was immediately cut off. Owing to cold weather, hundreds of gas stoves were burning and soon went out for lack of fuel. An extremely dangerous condition would have resulted when the gas was again turned on unless every unvented burner in the city was shut off. Few persons were aware of the situation, most people being asleep at the time. Because the gas distributed at Stillwater is practically odorless, there was increased possibility of both asphixiation of occupants and explosions due to a failure to detect presence of the gas.

The Stillwater Fire Department under Chief J. Ray Pence (member N.F.P.A.), was immediately notified. The off shift and volunteer firemen were called and a previously arranged emergency plan was placed in operation. The telephone company was notified and called in all the off shift operators. Fire department members called every telephone in the directory. In addition 3,500 bulletins were run off on mimeograph at the fire station and distributed by newsboys who were instructed to wake up every householder. The bulletin notified residents of the gas failure, warning that all heating appliances must be shut off and that sirens would be blown when the gas was turned on. A whistle at the city electric plant and sirens on fire engines provided means of notification.

The effectiveness of the precautions is apparent from the fact that gas was turned on again at 7 a.m. and there were no fires or explosions. The only injury was a burn suffered by a careless plumber who struck a match to light a gas furnace.

A SOMEWHAT similar emergency threatened the city of Parkersburg, W. Va. last year. A series of explosions and fires with possible tragic results was averted through the operation of a plan for handling major emergencies prepared by Chief Lloyd Layman (member N.F.P.A.). A large gas main broke several miles from the city causing a sudden drop of gas pressure which extinguished thousands of gas burners in the city. When normal pressure was restored 15 minutes later, unburned gas escaped through many unlighted stoves and heaters threatening serious fires and explosions.

The gas company immediately called on the police and fire departments for aid. Upon receiving the call, off duty police and firemen, gas company employees, and telephone operators were called. The local radio station issued warnings at frequent intervals throughout the day. More than 400 Boy Scouts were assigned to contact the occupants of every building. Whenever occupants could not be located, mimeographed notices were posted on doors and police headquarters were notified.

As the break occurred on a Sunday morning the police dispatched warnings to be read at each church. Three sound trucks were obtained and with sound equipment mounted on a fire truck covered the entire city. A special information bureau was set up by the telephone company to take care of calls for information directed to the gas company offices in order to keep the gas company lines open for necessary dispatches. Emergency squads of police and firemen with gas company employees entered buildings where the occupants could not be located. So effective were the precautions that not a single fire or injury resulted.

Membership Plan

Volunteer Firemen's Section National Fire Protection Association

WHERE 20 or more firemen in a volunteer company or department affiliate with the Volunteer Firemen's Section the cost is 50 cents a year *per man*. Each fireman will receive one copy of VOLUNTEER FIREMEN, the monthly journal of the Volunteer Firemen's Section, mailed regularly to his home address. The company or department automatically becomes a member of the National Fire Protection Association and is entitled to full privileges of membership. All the literature regularly issued to N.F.P.A. members is mailed to headquarters of the company or department.

Membership may be applied for by one member of the company or department collecting 50 cents for each of the 20 or more members and making a single remittance for the group, or the company or department may take a membership for its men and make a single remittance from the company or department treasury.

Companies With Less Than 20 Members

Because of the large amount of material mailed to members, not less than $10.00 can be accepted from any company or department for membership dues. In the case of companies or departments with less than 20 men this means that the cost divided among them will be slightly higher per man. Of course, some such companies or departments may prefer to make a single remittance of $10.00 from the company or department treasury. In other cases a few interested citizens, not members of the company or department, may be glad to contribute 50 cents apiece to make up the required minimum of 20, so that the members may secure the rate of 50 cents per man.

A.D.T. PERFORMANCE 1937

THE efficiency of A.D.T. Protection Services is not a matter of conjecture. Their effectiveness in minimizing fire and burglary losses can be determined accurately by the same method of statistical analysis that is the basis of insurance underwriting. The following performance records of A.D.T. Protection Services during the year 1937, merit the most careful consideration of executives and representatives of insurance underwriters:

Sprinkler Supervisory and Waterflow Alarm Service

Supervisory alarms, indicating impairment of sprinkler systems . . **108,769**

Waterflow alarms, indicating fire conditions or serious leaks **1,768**

Percentage of fire and water damage losses to insurable values of protected properties . . . . . **2/100ths of 1%**

During the past ten years, subscribers to A.D.T. Sprinkler Supervisory and Waterflow Alarm Service have enjoyed 99.97% IMMUNITY FROM FIRE AND WATER LOSSES.

Watchman Supervisory and Manual Fire Alarm Service

Investigations of failures of watchmen to signal on schedule **179,800**

The total number of signals supervised was approximately 300,000,000; hence, the watchman patrol efficiency was **99.94%**

Manual Fire Alarms handled. . **1,353**

Percentage of fire losses to insurable values . . . . . **2/100ths of 1%**

During the past ten years, subscribers to A.D.T. Watchman Supervisory and Manual Fire Alarm Service have enjoyed 99.96% IMMUNITY FROM FIRE AND WATER LOSSES.

Burglar and Holdup Alarm Services

Burglars captured as result of A.D.T. alarms **455**

Percentage of losses in attacks on A.D.T. protection to insurable values protected . . . . . **9/1,000ths of 1%**

During the past ten years, subscribers to A.D.T. Burglar and Holdup Alarm Services have enjoyed 99.98% IMMUNITY FROM BURGLARY LOSSES.

A.D.T. Central Station Protection Services are available in 350 communities throughout the country. Booklets describing these services, as well as any other information desired, will gladly be sent upon request. Write to the A.D.T. Executive Offices, 155 Sixth Avenue, New York, N. Y., or to the nearest A.D.T. Central Station Office.

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A·D·T

1 GALLON—DUPLEX PUMP

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Here is the equivalent of four 1-quart extinguishers built into one thus making this large quantity of vaporizing liquid available without running for another extinguisher when more than the average size blaze is encountered. This is but one of the complete line of Fyr-Fyter Extinguishers each of which have exclusive merits which stamp them as superior.

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If you are interested in adding to your income by spare time work or in building a permanent business for yourself without investment in stock, fixtures, etc., write for our new Dealer's Plan to

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Dept. 20-29 DAYTON, OHIO

You Get the Best When You Insist On

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Helmet Brand

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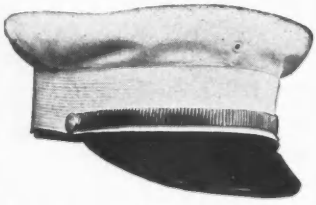


Officers' White Collar Duck caps with Extra cover at $3.75. New York Regulation gilt or chromium plated strap at $1.00 extra.

Privates' Blue caps at $1.75 to $2.75 apiece.

Postage extra

George Brunssen Co., Inc.
104 Bleecker St.,
New York

Bring Home $10.00 Easy Money

Pyrene Prize Letter Contest Pays for Stories of Good Work Done by Firemen With Extinguishers

FIREMEN know better than anyone else what fire extinguishers can do and that is why the Pyrene Prize Letter Contest is so popular. You may know of a case where an extinguisher saved a life or made a good stop; just tell the facts your own way. Having won a previous prize does not bar you from making another entry. The contest is sponsored jointly by the Pyrene Manufacturing Company of Newark, N. J., and VOLUNTEER FIREMEN.

FIRST PRIZE — $10.00

JERRY KEEFE

Protection Hose Co. No. 7, Chateaugay, N. Y.

Save Town Hall

"Some time ago one of our local organizations was decorating the town hall for their annual ball. One of the members was coloring the bulbs in a chandelier by immersing the lighted bulbs in an open can of lacquer. While doing this one of the bulbs broke, setting fire to the can of lacquer. The flames were immediately drawn up into the attic through an open ventilator above the chandelier. Two members of our fire company entering the hall at the time seized a soda-acid extinguisher hanging near the door and entered the attic. They found the flames making great headway in the tar paper that had been placed over the rafters for insulation. They extinguished the blaze before any great damage was done. Due to the dense smoke from the burning tar paper it would have been impossible to enter the attic a minute later as there was little ready means of ventilation. Having this fire extinguisher on hand prevented serious damage to a $75,000 building."

SECOND PRIZE — $3.00

P. G. GEARING, *Assistant Chief,*

Fire Department, Sebring, Fla.

Kills Roof Fire

"While traveling from Jacksonville to Sebring I came through a small town after dark. On the outskirts of the town I saw a commotion which easily foretold a fire. When I drew up to the house I saw people running with buckets, hurrying them up a ladder to a couple of men who were tossing the water into quite a large hole in the roof, but seemingly to no avail. There was a lot of smoke but not a great deal of flame visible as the fire had mushroomed under the shingles and was rapidly getting away from the men. I told them I was a visiting fireman and if they would let me get up on the roof I might do them some good with the small carbon tetrachloride extinguisher I always carry in my car. I got up there and pumped all the 'carbon tet' at the flames and soon had the fire apparently out. Before I left I had them cut another hole in the roof to make sure no embers remained as they didn't even have a garden hose to fight fire with."

THIRD PRIZE — $2.00

ALLEN I. POSTLEWAIT

Manoa Volunteer Fire Co., Manoa, Pa.

Extinguisher Saves Lives

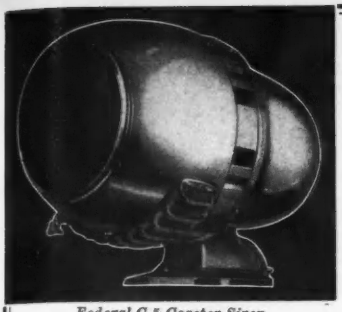
"Several years ago I was employed by the Reading St. Railway Co. on a run between Reading and Womelsdorf, Pa., the tracks running parallel to the state highway. On the particular night it was raining and freezing, making driving very miserable. A model T Ford coach skidded and turned over on the tracks, trapping the driver and his two little girls. When we arrived a few minutes later, smoke was pouring out from under the hood and the floor boards had started to burn. I grabbed a one quart carbon tetrachloride extinguisher which we carried as regular equipment and a few pumps had the fire out. We righted the car and helped the occupants out. They were badly shaken up and suffering from smoke. They would have burned up if we had not arrived with the extinguisher when we did."

HONORABLE MENTION

Richard Hough, Charles Town, W. Va.; Assistant Chief Sid Bean, Tablequah, Okla.

CONTEST RULES

1. Contestants in the Pyrene Prize Letter Contest must be members of their local fire department.
2. Letters are to describe actual experiences where an approved fire extinguisher of any make has saved lives or property.
3. Trade names may be used but will be deleted in publication. Publishers reserve the right to edit winning letters to permit publication.
4. Each contestant automatically vouches for the truth of the facts presented from his own or others' experience.
5. Only one letter may be submitted each month.
6. Letters must be legibly written in ink or typewritten on white paper, one side only. Preference will be given to letters not over 250 words in length.
7. Letters received after the 8th of the month will be judged in following month's competition.
8. Monthly prizes in cash will be: 1st, $10.00; 2nd, $3.00; and 3rd, $2.00.
9. Address contest letters to Pyrene Prize Letter Contest, National Fire Protection Association, 60 Batterymarch St., Boston, Mass.



Federal C-5 Coaster Siren

Specify a Federal C-5 Coaster Siren

With Electric Brake and Red Light on Your New Equipment for Speed With Safety

Triple action in this new, powerful streamlined C-5 Coast is attributed to:

SOUND of a new compelling tone.
LIGHT that flashes on and off with siren roar.
ECONOMY—it actually coasts for more than 120 seconds.

Write for Bulletin No. 56

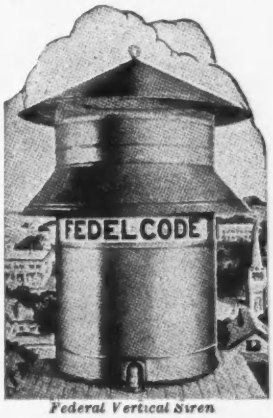
Federal Vertical Sirens

Protect Your Property

Save Lives in Your Community

The Federal Vertical Siren distributes sound in a wide range in all directions. Rugged in construction to withstand all kinds of abuse. Entirely weatherproof. Equipped with special high speed ball-bearing motor. Be sure to specify a new Federal Vertical siren. Our engineers will gladly survey your particular problem free of obligation. Consult us today.

Write for Bulletin No. 55



Federal Vertical Siren

FEDERAL ELECTRIC COMPANY

8717 SOUTH STATE STREET CHICAGO, ILLINOIS

REAL HEAD SAFETY WITH SMART GOOD LOOKS!

The M·S·A FIREMAN'S HELMET

Protection under all circumstances is the first thing you want in a fireman's helmet. And that's where the M.S.A. Fireman's Helmet is supreme. Its molded bakelite construction provides tremendous strength against blows and bumps—insulation against electric shock—and does not deteriorate under the effects of water, oil, chemicals, heat or perspiration. Another prime point—the helmet is not only light and exceptionally comfortable to wear, but in addition has that "on parade" trim smartness of design that appeals to firemen everywhere! Let us arrange an actual demonstration for your department, without obligation of any kind.

MINE SAFETY APPLIANCES COMPANY

BRADDOCK, THOMAS AND MEADE STREETS, PITTSBURGH, PA.

District Representatives in Principal Cities

40% OF ALL FIRES PUT OUT WITH INDIAN FIRE PUMPS SAYS TEXAS FIRE CHIEF!

D. B. Smith & Co., Utica, N. Y. — City of Jacksonville, Jacksonville, Texas.

Gentlemen:—We have two fire trucks, and on the smaller truck we have INDIAN FIRE PUMPS mounted. The reason I think so much of INDIAN FIRE PUMPS is because they are used to put out about 40% of the fire alarms that come in, such as overheated stoves, kitchen stoves, small blazes confined to one room, and a great number of the small fires that break out around the chimneys of wood and shingled roofs.

The biggest advantage of the INDIAN is in fighting the numerous grass fires in and around town; they are the best yet for this purpose. Every fire department should have them. Yours truly,

CARLTON ODOM, Fire Chief.

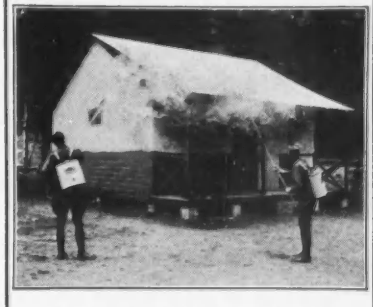
Just think of it

The average city can handle all its small fires with this swift, economical fire fighter. Think of the SAVING in TIME, in MEN, in MONEY.

Roof fires, chimney fires, overheated stoves, room and partition fires, grass, brush and all spot fires, are stopped dead in short order by the world famous INDIAN. And there's nothing tricky about it.

The INDIAN uses plain water, acknowledged the best extinguisher, with a 5-gallon tank and a solid brass hand pump that throws a powerful 50-foot stream right where you want it and when you want it.

SEND FOR CATALOG



Putting out roof fire with INDIANS

D. B. SMITH & CO.

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Hercules Equip. & Rubber Co.
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Pacific Marine Supply Co.
1217 Western Ave., Seattle, Wash.
Western Loggers' Machinery Co.
302 S.W. 4th St., Portland, Oregon

BARTON FIRE PUMPS

Everything Better — EVEN THE PRICE!

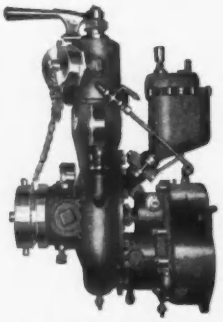
Believe it or not—in the case of fire pumps, **the best costs the least.**

Barton Fire Pumps **front-mounted** can save your community HUNDREDS OF DOLLARS in the cost of complete apparatus—yet give you everything required in the way of first-class protection.

Incorporated in Barton Pumps is the utmost in high-efficiency and endurance. We use the finest materials — stainless steel, ball bearings, etc. **They pass all Underwriters' Tests with flying colors.**

Remember this: so excellent is Barton performance and construction that NOT IN TEN YEARS do we know of a single pump which has failed in line of duty.

Write us today for the address of our nearest representative. Let him show you how to save money, and still have the kind of pumping apparatus your whole community will be proud to own.



Barton U-Type Fire Pumps are regularly equipped with **gear-drive.** Truck motor operates at approximately one-half pump speed — **no strain on motor.** Available in 350, 400, 500 and 600-gallon sizes. Also other Barton Pumps at still lower prices.

Why Over 1000 Chiefs Chose BARTON Pumps

1 —**Centrifugal type** — pumps clean or dirty water.

2 —**Easily installed on front of truck** — great economy — no chassis changes required.

3 —**Large capacities and high pressures**—equal to any emergency.

4 —**Underwriters' Tested.**

5 —**Simple design** — dependable and trouble-free.

6 —**Fully accessible** — no hidden parts.

7 —**Light weight.**

8 —**Easy to operate** — simple as driving a car.

9 —**Automatically primed.**

10 —**Guaranteed by Million Dollar Company.**

AMERICAN-MARSH PUMPS, INC.

CENTRIFUGAL, TURBINE, STEAM, AND POWER PUMPS

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